

Auto component supply chain: a path to global India

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1. Introduction

Supply chain management works to bring the supplier, the distributor, and the customer into one cohesive process. *The Supply Chain Council defined supply chain as* ‘Supply Chain: The flow and transformation of raw materials into products from suppliers through production and distribution facilities to the ultimate consumer., and then Sunil Chopra and Meindl,(2001) have define Supply chain management as ‘Supply Chain Management involves the flows between and among stages in a supply chain to maximize total profitability.’ After 1950, supply chain management got a boost with the production and manufacturing sector getting highest attention. The inventory became the responsibility of the marketing, accounting and production areas. Order processing was part of accounting and sales. Supply chain management became one of the most powerful engines of business transformation. It is the one area where operational efficiency can be gained. It reduces organizations costs and enhances customer service. With the liberalization of world trade, globalization, and emergence of the new markets, many organizations have customers and competitions throughout the world, either directly or indirectly. Business communities are aware that global competitiveness is the key to the success of a business. Competitiveness is ability to produce, distribute and provide products and services for the open market in competition with others. The supply chain, a critical link between supplier, producer and customer is emerged now as an essential business process and a strategic lever, potential value contributor a differentiator for the success of any business. Supply chain management is the management of all internal and external processes or functions to satisfy a customer’s order (from raw materials through conversion and manufacture through logistics delivery.). Goods-either in raw form or processed, whole sale or retailed distribution, business or technology services, in every day life- in the business or household- directly or indirectly supply chain is ubiquitously associated in expanding socio-economic development. Supply chain growth competitive performance and supporting strong growth impulse at micro as well as micro economic levels. Keeping the India vision at the core of the objective, the role of supply chain is to take up social economic challenges, improve competitive advantages, develop strategies,

built capabilities, enhance value propositions, adapt right technology, collaborate with stakeholders and deliver environmentally sustainable outcomes with minimum resources.

Major forces among those shaping the topography of supply chain operational landscape are: accelerated pace of ongoing globalization of markets, social economic landscape are: accelerated pace of ongoing globalization for markets, societal demands for the higher environmental performance, regulatory complications, financial market demands for increased profitability and capital productivity, dynamic expectations of the customers, shorter economic life cycles of product & technology and changing work force requirements.(S.N.Panigrahi, 2007)

Today Indian automotive industry is fully capable of producing various kinds of vehicles and can be divided into three broad categories: Cars, two-wheelers and heavy vehicles. The automobile industry in India is the ninth largest in the world with an annual production of over 2.3 million units in 2008 — is expected to become one of the major global automotive industries in the coming years. A number of domestic companies produce automobiles in India and the growing presence of multinational investment, too, has led to an increase in overall growth. The Indian automotive industry has grown at a CAGR of 14 per cent p.a over the last 5 years, with total sales of vehicles reaching around 9 million vehicles in 2005-06. It has the potential to emerge as one of the largest in the world. The industry has emerged as a key contributor to the Indian economy.

The Indian auto-component industry has internationalized rapidly after the economic liberalization in 1991. The key source of international competitive advantage for the industry has been the low-cost position coming from low labor costs. In several component segments, Indian firms enjoy a 10-30% cost advantage over international prices. This has enabled them to confront international competition in spite of the presence of several disadvantages. A severe threat to the cost advantage comes from lower labour productivity, and higher cost of raw materials and logistics than elsewhere in the world. Serving the right customers, finding the right supplier and, developing trust with the right supplier have a great impact on today's as well as future business performance. Hence there is need of well established supply chain for the competitive advantage for auto component industry. This supply chain must focus on strengthening linkages with customers and supplier, understanding long term technology needs, and adoption, forming collaborative relationships with the stakeholders, reducing risk and cost of operations, gaining access to global networks, promoting sustainable growth. Hence detail study of key factor for supply chain need to be studied.

The Indian automobile ancillary sector is transforming itself from a low-volume, highly fragmented one into a competitive industry, and backed by competitive strengths, technology and transition up the value chain. Broadly the Indian automotive component industry can be divided into the organized and the unorganized segments. While the forte of the organized sector is the high valued added precision engineering products, the presence of a large unorganized sector is characteristic especially of the lower value-added segments of the industry (Radhakrishnan et al.).

2. Research methodology

The approach of the research is exploratory in nature. The survey instrument designs were focused in generating a good response rate and at the same time helping to develop a sound instrument. Three questions were asked to measure effectiveness of supply chain of supply

chain management for auto component manufacturing industries. Likert scale of measurement is used to measure some items.

The survey was done among 101 leading auto component manufacturers in and around Pune. There were on an average 3 respondents from one company. In all we got 307 responses from respondent SCM professionals. Researcher used chi square test method for analysis. The responses were collected from a sample of supply chain professionals in a randomly selected sample from identified list of auto component manufacturing industries gathered through various sources. SCM professionals can be defined as persons who may be involved in the analysis, operations, and decision processes relative to transportation from supplier to customer.

3. Literature review

Supply chain management theories say that partnerships can be an important source of competitiveness where both partners can win with the close collaboration. These beneficial partnerships require strategic thinking and openness from both parties in order to succeed (Christopher-Jüttner, 2000). In our development stages model in SCM we also found strategy as a prerequisite to become from a transaction dominated company into an internally integrated company. Only if strategy exists and internal integration took place can a company develop its external relations on the long run, and become an externally integrated company with well developed inter-organizational processes and coordination systems, and with strategic partners. Certainly, it does not mean that companies have to make strategic partnerships with all of their partners (Bensaou, 1999), but a consistent set of values and content of strategy is required to operate successful partnerships (Dyer – Nobeoka, 2000). So the way how supply chain is developed and managed is highly dependent on the existence and content of the strategy that the collaborating partners have.

4. The strategic role of supply management

Supply chain management has become popular during the past decade is because of the phenomenon of globalization. Increased competition has made business look for core competencies for enhanced performance. Then the success mantra would be strategic roel of supply chain in global environment.

		Strategic Plan		Total
		Yes	No	
Success in managing Supply Chain	Failure	0	0	0
	Weak	33	0	33
	Fair	39	0	39
	Good	141	52	193
	Very Good	42	0	42
Total		255	42	307

Chi-Square Tests

	Value	df	P value
Pearson Chi-Square	36.978(a)	3	0.000

Researchers tried to find out does auto component industries focus on strategic plan for its supply chain. A Chi square test is applied to know the association between two different categories. Result of Chi Square test (P value = 0.00) shows that there is statistically highly significant association between supply chain strategic plan and success of Supply Chain. Hence researcher could infer that the companies having a clear supply chain strategic plan are managing their supply chain effectively.

Himangshu Paul and Sakun Boon-itt did the research on Thai automotive industry to understand the importance of Supply Chain. They concluded that, it is important to recognize that effective and efficient management of supply chain requires integration of all processes that go beyond purchasing and logistic activity. They took 112 first-tier suppliers in automotive industry. With reference to inference 1 & Inference 2, researcher could infer that the companies having a clear supply chain strategic plan & separate supply chain department are managing their supply chain effectively.

5. Conclusion

This paper reflected that effectiveness of supply chain is winning tools for business of auto component industry. The world economy is becoming borderless and integrated. The integrated world economy and global competitive arena is changing the way in which companies traditionally operated. There is also geographical, functional and sectorial integration, which gives a truly global playing field to the companies and results in global supply chains. Hence Global Supply Chain is playing vital role in Global competitiveness

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